West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



For Final Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-03900618-2017 Application Received: May 9, 2016 Plant Identification Number: 039-00618 Permittee: Univation Technologies, LLC

Facility Name: South Charleston Catalyst Plant
Mailing Address: P.O. Box 8361 South Charleston, WV 25303

Physical Location: South Charleston, Kanawha County, West Virginia

UTM Coordinates: 438.4 km Easting • 4,245.5 km Northing • Zone 17

Directions: From Charleston take Kanawha Turnpike exit. Travel west on Kanawha

Turnpike approximately 0.5 miles.

Facility Description

The facility produces organo metallic compounds that are shipped to other companies for use. Ancillary operations include small boilers to supply steam, analytical quality assurance and control laboratories, and container storage/shipping. SIC: 2869

Emissions Summary

Plantwide Emissions Summary [Tons per Year]Regulated PollutantsUnivation Potential EmissionsUnivation 2015 Actual EmissionsCarbon Monoxide (CO)4.20.60Nitrogen Oxides (NOx)2.00.32Particulate Matter (PM2.5)1.00.04

Plantwide Emissions Summary [7]	Cons r	per Year	ı
---------------------------------	--------	----------	---

Regulated Pollutants	Univation Potential Emissions	Univation 2015 Actual Emissions
Particulate Matter (PM ₁₀)	1.0	0.04
Total Particulate Matter (TSP)	1.0	0.04
Sulfur Dioxide (SO ₂)	0.1	0.05
Volatile Organic Compounds (VOC)	5.3	1.43

 PM_{10} is a component of TSP.

Hazardous Air Pollutants	Univation Potential Emissions	Univation 2015 Actual Emissions	
Total HAPs	5.1	1.39	

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

The Union Carbide Corporation Technology Park Operations (03900004) and Univation Technologies, LLC South Charleston Catalyst Plant (03900618) are considered a single source for Clean Air Act permitting purposes and have the potential to emit over 100 tons per year of VOC's. Due to these facilities' potential to emit over 100 tons per year of criteria pollutant, Univation Technologies, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Particulate Matter emissions
	45CSR6	Open burning prohibited.
	45CSR7	Particulate Matter emissions
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Preconstruction permits for minor sources.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for HAPs pursuant to 40
		C.F.R. Parts 61 and 63.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart FFFF	Miscellaneous Organics NESHAP (MON)
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 et seq., 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-2631A	5/8/2009	PD11-003

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

The Univation Technologies, LLC South Charleston Catalyst Plant (SCCP) was previously permitted as the Union Carbide Corporation (A subsidiary of The Dow Chemical Company, "Dow") as R30-03900004-2011 Group 3 of 3 Market Development Plant. On November 16, 2012, DAQ acknowledged the transfer of this Title V Permit to Univation Technologies, LLC and declared that the Title V Permit was inactive as the Potential to Emit was below the thresholds necessary to maintain a Title V Permit. Since then, Dow took ownership of Univation Technologies SCCP. Since Dow has common ownership of the UCC Technology Park Operations (03900004) and Univation Technologies South Charleston Catalyst Plant (03900618) and they are physically adjacent facilities, the PTE of both groups must be combined to determine Title V applicability. As the combined site has a PTE of over 100 tons per year of VOCs, Univation Technologies LLC is required to obtain a Title V Permit. The previous Title V Permit R30-03900004-2011 Group 3 of 3, which was placed inactive by this Agency in a letter dated November 16, 2012 was used as a template for preparation of this Permit.

Changes to that permit include:

Section 4.0:

Requirements for a new OMU3 process have been included in Section 4 (see 4.1.20, 4.2.8, 4.3.2, 4.4.6 and 4.5.1.) which refer to Attachment 2. Per 40 CFR 63 Subpart FFFF, NESHAPs for Miscellaneous Organic Chemical Manufacturing Operations, records must be kept for Group 2 process vents. No emission controls are required for Group 2 MON process vents. However, OMU3 process vents are routed to the OMU2 flare for reduction of emissions. Emissions from equipment leaks are controlled by 40 CFR 63, Subpart H pressure testing alternative as provided by the MON MACT.

The OMU2 Process equipment table in Section 4.0 has been revised. The OMU3 Process equipment table in Section 4.0 has been added.

Permit Determination PD11-003 identified the addition of 2,2,4 – Trimethyl Pentane emissions to the production process. An emission limit has been added for this pollutant in Condition 4.1.1.

Emission Point AR9 no longer exists. References to AR9 have been removed from the Section 1.1 Equipment Table and Section 4.0 Equipment Table. Condition 4.1.11 has been changed to "Reserved". The reference to Condition 4.1.11 has been removed from Condition 4.2.5.

Attachment 2 has been added to identify the requirements of 40CFR63, Subpart FFFF for the OMU3 process. Conditions 4.1.20, 4.2.8, 4.3.2, 4.4.6, and 4.5.1 have been revised to include references to Attachment 2.

Section 5.0:

45CSR2 and 45CSR10

Since the new boilers (Boiler #1 and Boiler #2) are indirect fired with a maximum design heat input of less than 10 MMBTU/hr, they are not subject to the requirements of 45CSR§§2-4, 5, 6, 8, and 9, and 45CSR\$10 as specified by 45CSR§2-11.1 and 45CSR§10-10.1.

Boilers #1 and #2 are subject to the ten percent opacity limit of 45CSR§2-3.1. This is given in Condition 5.1.1. 45CSR§2-8.4.b exempts these boilers from opacity monitoring since they combust only natural gas. Condition 5.4.1 requires the Permittee to use only natural gas in these boilers.

Miscellaneous:

Changed the Company Name, Facility Name, Facility ID, address, and telephone number.

Removed Conditions 3.1.9 and 3.5.10 that referenced greenhouse gas emissions.

Added Boiler #1 and Boiler #2 and revised the Section 1.1 Equipment Table.

As Univation does not produce, handle, process, distribute, or store chemicals listed in 40 CFR §68.130 at equal to or greater than threshold amounts, Condition 3.1.8 has been revised accordingly.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 C.F.R. Part 68 Risk Management Plan. SCCP is not required to submit a risk management plan because the SCCP does not produce, handle, process, distribute, or store chemicals listed in 40 CFR § 68.130 at equal to or greater than threshold amounts. (40 CFR §68.130(a))

40 C.F.R. Part 64 – The Univation Technologies South Charleston Catalyst Plant Processes are not subject to the Compliance Assurance Monitoring (CAM) rule because they are subject to 40 C.F.R. Part 63 Subpart FFFF that was proposed after November 11, 1990 (exempt per 40CFR§64.2(b)(1)(i).

40CFR63, Subpart JJJJJJ: NESHAPS for Industrial, Commercial, and Institutional Boilers Area Sources.

Boilers #1 and #2 are not subject to this area source MACT because they are fueled only by natural gas 40CFR§63.11195(e).

40 C.F.R. Part 63, Subpart EEEE: Organic Liquids Distribution (Non-Gasoline) NESHAP

The transfer racks unload organic liquids containing less than 5% by weight or more of hazardous air pollutants. 40CFR§63.2343(a) requires the permittee to keep records that the transfer racks are not subject to controls. This is given in Condition 4.4.7.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: March 13, 2017 Ending Date: April 12, 2017

Point of Contact

All written comments should be addressed to the following individual and office:

Mike Egnor

West Virginia Department of Environmental Protection

Division of Air Quality

601 57th Street SE

Charleston, WV 25304

Phone: 304/926-0499 ext. 1208 • Fax: 304/926-0478

michael.egnor@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.